

Split

Work Order ID 159679-2

159679

Page 1

Monday, April 17, 2017 2:27:08 PM

Item ID: 646.3301 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Upper Cutter Assembly /
Start Date: 4/17/2017 Start Qty: ~~10.00~~ *10* Cust Item ID:
Required Date: 5/11/2017 Req'd Qty: 10.00 *10* Customer:
Reference: SCHEDULED/S

Approvals: Process Plan:  Date: APR 17 2017 Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.3300	NC3								
110	Pick Kit	0.00			DAS 30 9-89				APR 17 2017
110									
Packaging	Memo	0.80							
Packaging									
120		0.00							
120									
Small Fab	Memo	3.89							
Small Fab	TWO fastener must be install finger-tight (see note 9)								
	Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.								
	A/R RTV LOCTITE 598: 1306701								
	exp. date: 10/18								

DAS
36
9-89

1X

17/04/18

Picklist Print

Page 1

Monday, April 17, 2017 2:27:07 PM

Work Order ID: 159679

159679

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assembly

Start Date: 4/17/2017

Required Date: 5/11/2017

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM IPP
REV:B 15.01.07 AS PER DWG NC3 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3310		Manufactured	No			110	Each	10.0000	1	10	DAS 30 9-89		APR 17 2017
646 3310									**				
LH Half - Upper Cutter Assembly													
				<u>Location</u>				<u>Loc Qty</u>					
				CCK022				10					
				151673				2					
				155812				8					
646.3311		Manufactured	No			110	Each	11.0000	1	10	DAS 30 9-89		APR 17 2017
646 3311									**				
RH Half - Upper Cutter Assembly													
				<u>Location</u>				<u>Loc Qty</u>					
				CCK022				11					
				155708				6					
				156787				5					
646.3312		Manufactured	No			110	Each	16.0000	1	10	DAS 30 9-89		APR 17 2017
646 3312									**				
Center Plate													
				<u>Location</u>				<u>Loc Qty</u>					
				cck023				16					
				155841				6					
				156875				10					

Picklist Print

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Page 2

Work Order ID: 159679

Parent Item: 646.3301

Parent Item Name: Upper Cutter Assembly

159679

646.3301

Start Date: 4/17/2017

Required Date: 5/11/2017

Start Qty: 10.00

Required Qty: 10.00

646.3313

Manufactured No

110

Each

16.0000

1

10

DAS
30
9-89

APR 17 2017

646.3313

Upper Guide

**

Location

Loc Qty

Loc Code

cck059A

16

155732

6

156803

10

646.3314

Manufactured No

110

Each

9.0000

1

10

DAS
30
9-89

APR 17 2017

646.3314

Blade

**

Location

Loc Qty

Loc Code

cck103

9

151675

1

155621

8

646.3315

Manufactured No

110

Each

13.0000

1

10

DAS
30
9-89

APR 17 2017

646.3315

Blade

**

Location

Loc Qty

Loc Code

cck103

13

155385

3

156852

10

646.3316

Manufactured No

110

Each

14.0000

1

10

DAS
30
9-89

APR 17 2017

646.3316

Blade

**

Location

Loc Qty

Loc Code

cck103

14

155368

4

156804

10

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Shop Packet Print

Page 2

Picklist Print

Monday, April 17, 2017 2:27:08 PM

Work Order ID: 159679

159679

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assembly

Start Date: 4/17/2017

Required Date: 5/11/2017

Start Qty: 10.00

Required Qty: 10.00

NAS1149FN832P

Purchased

No

110

Each

1,498.000

36

360

NAS1149FN832P

Washer

**

17/04/18 DAS 36 9-89

Location

Loc Qty

Loc Code

GA

323

M135058

232

M136182

91

ST263

1175

M136866

1175

51
309

MS21042L08

Purchased

No

110

Each

422.0000

18

180

MS21042L08

Nut

**

17/04/18 DAS 36 9-89

Location

Loc Qty

Loc Code

GA

394

m135274

18

m135978

376

ST303

28

m137061

28

180

NAS1149F0332P

Purchased

No

110

Each

1,744.000

6

60

NAS1149F0332P

Washer

**

17/04/18 DAS 36 9-89

Location

Loc Qty

Loc Code

GA

335

m133709

335

ST262

1409

m136835

8

m137075

1401

60

Picklist Print

Monday, April 17, 2017 2:27:08 PM

Work Order ID: 159679

159679

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assembly

Start Date: 4/17/2017

Required Date: 5/11/2017

Start Qty: 10.00

Required Qty: 10.00

AN3-12A

Purchased

No

110

Each

256.0000

2

20

DAS

AN3-12A

DAS

APR 17 2017

36

Bolt

30

9-89

9-89

Location

Loc Qty

Loc Code

over003

206

153854

206

ST349

50

m135603

50

20

MS21042L3

Purchased

No

110

Each

1,287.000

3

30

DAS

MS21042L3

Nut

17/04/18

36

9-89

Location

Loc Qty

Loc Code

FP001

100

m135945

100

GA

198

m134360

102

M136665

96

30

OVER007

800

m134360

0

M136665

300

m137166

500

ST303

189

m137073

189

Picklist Print

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Page 5

Work Order ID: 159679

159679

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assembly

Start Date: 4/17/2017

Required Date: 5/11/2017

Start Qty: 10.00

Required Qty: 10.00

MS27039-08-19

Purchased

No

110

Each

304.0000

18

180

MS27039-08-19

Screw

17/04/18
DAS 36 9-89

Location

Loc Qty

Loc Code

GA

50

m135948

50

over006

100

m137061

100

ST277

154

m136851

54

m136975

50

m137178

50

12
110
50
18

AN3-14A

Purchased

No

110

Each

187.0000

1

10

AN3-14A

Bolt

DAS

30

9-89

APR 17 2017

Location

Loc Qty

Loc Code

over003

155

m134852

0

m137075

155

ST349

32

m136838

32

10

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Shop Packet Print

Page 5

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04765

SHEET 1 OF 1

DWG NO. 646.3300

REV: NC

PREPARED BY J. SOTO

DATE: 12/08/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: UPPER CUTTER ASSY

APPROVED BY:

ENGR. *[Signature]*

MFG. *[Signature]*

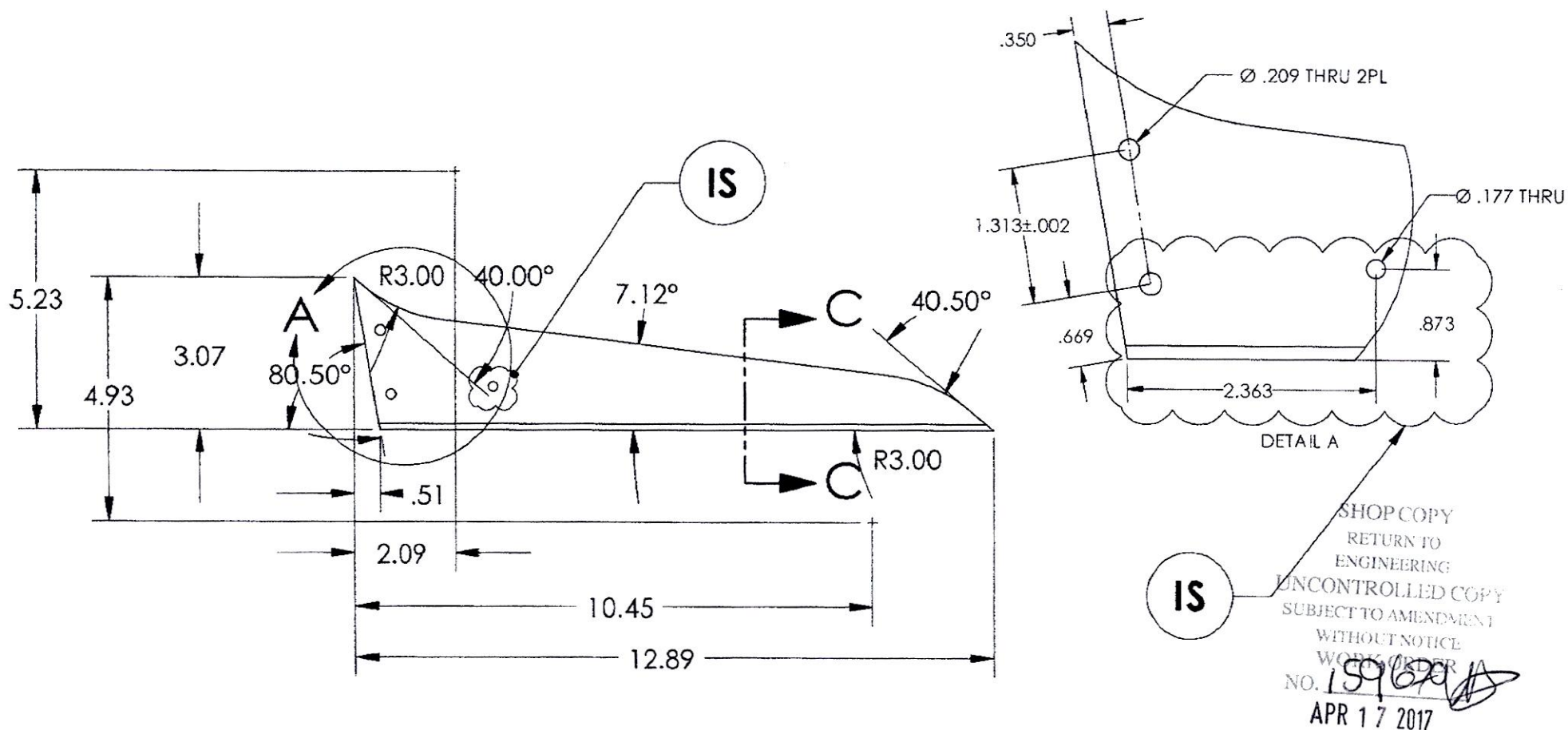
QC *[Signature]*

EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

REASON: ADDED HOLE DIMENSION TO 646.3313.

SHEET 5 IS:



DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

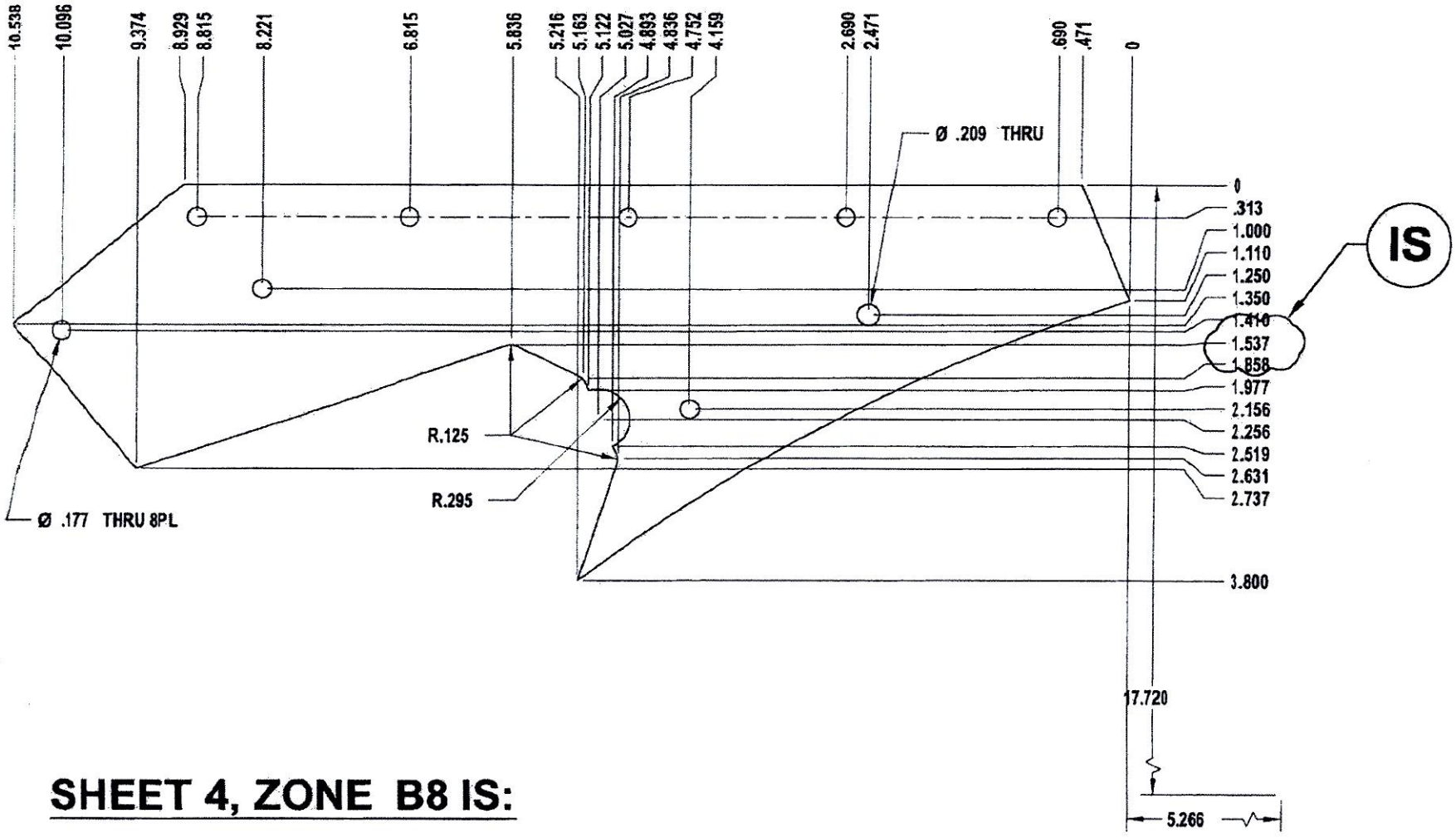
CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03724				SHEET 1 OF 1	
	DWG NO. 646.3300	REV: N/C	PREPARED BY B. PETERS	DATE: 12/05/12	EFFECT ON DWG ☐ INC. ☒ UNINC.	
	DWG TITLE: UPPER CUTTER ASSY					
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED ORDINATE DIMENSION.				ECR: D-12-025	

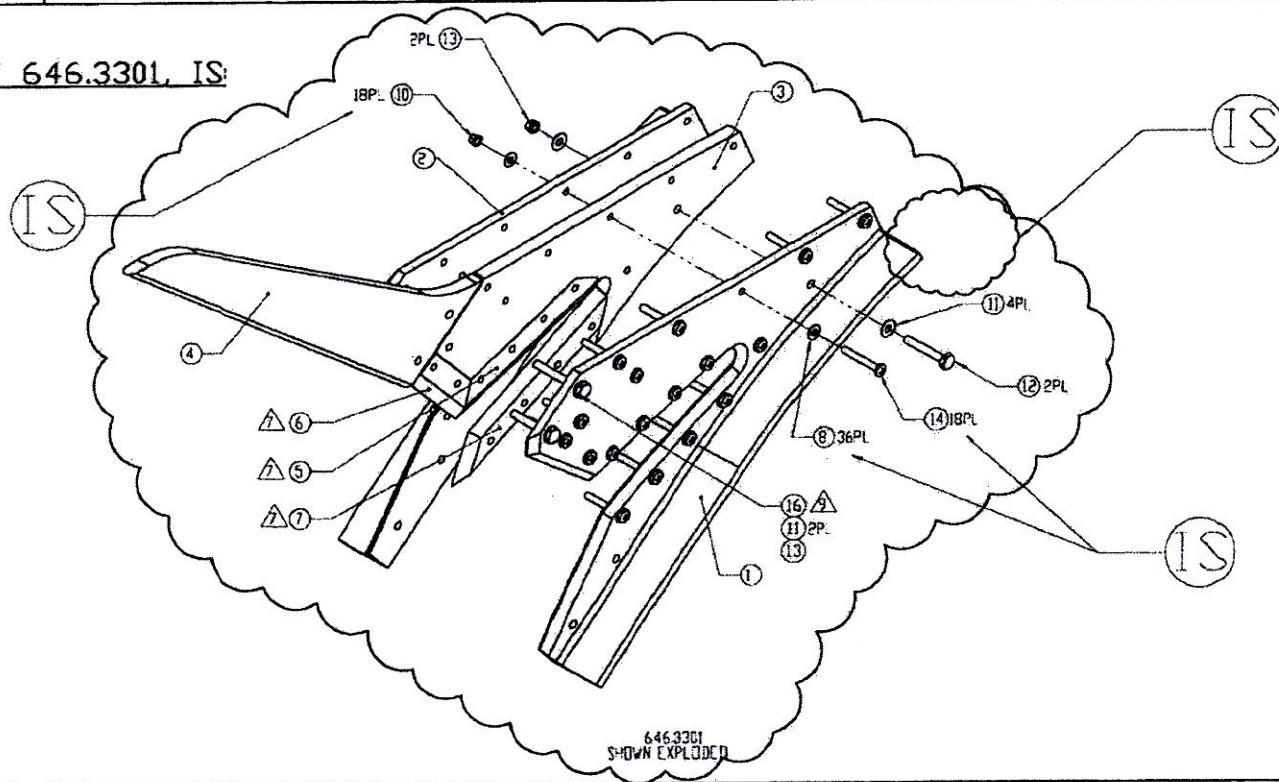


SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:	☐ RFMS ☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☐ BOM	CHANGE CATEGORY	DER REVIEW REQUIRED
		☐ MAJOR ☒ MINOR	☐ YES ☒ NO

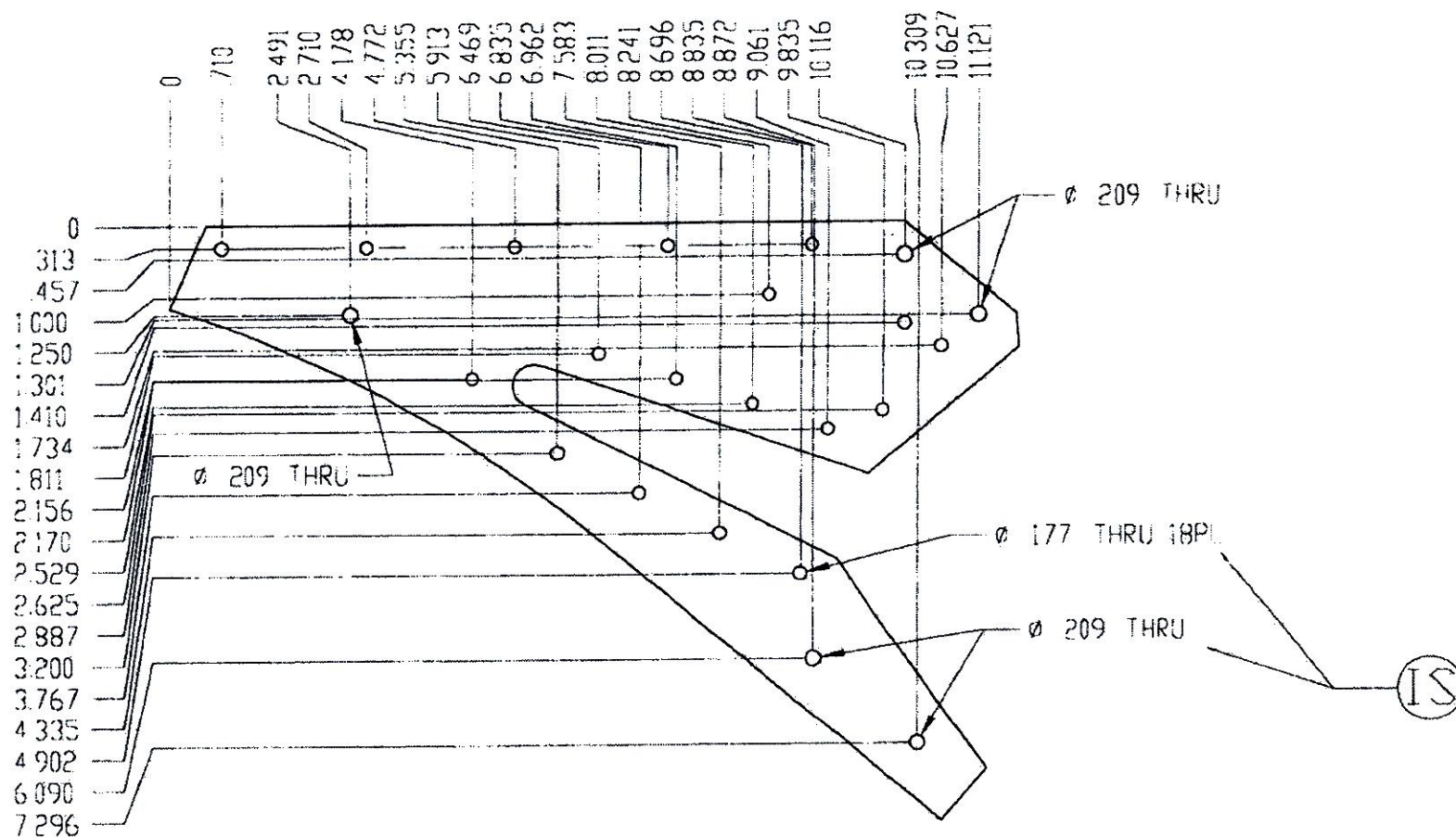
APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 02196			SHEET 1 OF 2	
	DWG NO. 646.3300	REV: N/C	PREPARED BY S. HUFF	DATE: 01/05/09	EFFECT ON DWG ☐ INC. ☒ UNINC.
	DWG TITLE: UPPER CUTTER ASSY				
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF:	NEXT ORDER
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE	REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS				

SHEET 1, VIEW 646.3301, IS:



14	R	601.2765	18	SCREW	MS27039-0819
10	R	601.1541	18	LOCKNUT	MS21042L08
9	D	601.2766	3	RIVET	MS20470AD5-18
8	R	601.2764	36	WASHER	NAS1149FN832P
			.3301		
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED:				☐ MDL ☒ INSTALL INSTRUC ☒ ICA ☐ FMS ☒ BOM	CHANGE CATEGORY ☐ MAJOR ☒ MINOR
				DER REVIEW REQUIRED ☐ YES ☒ NO	

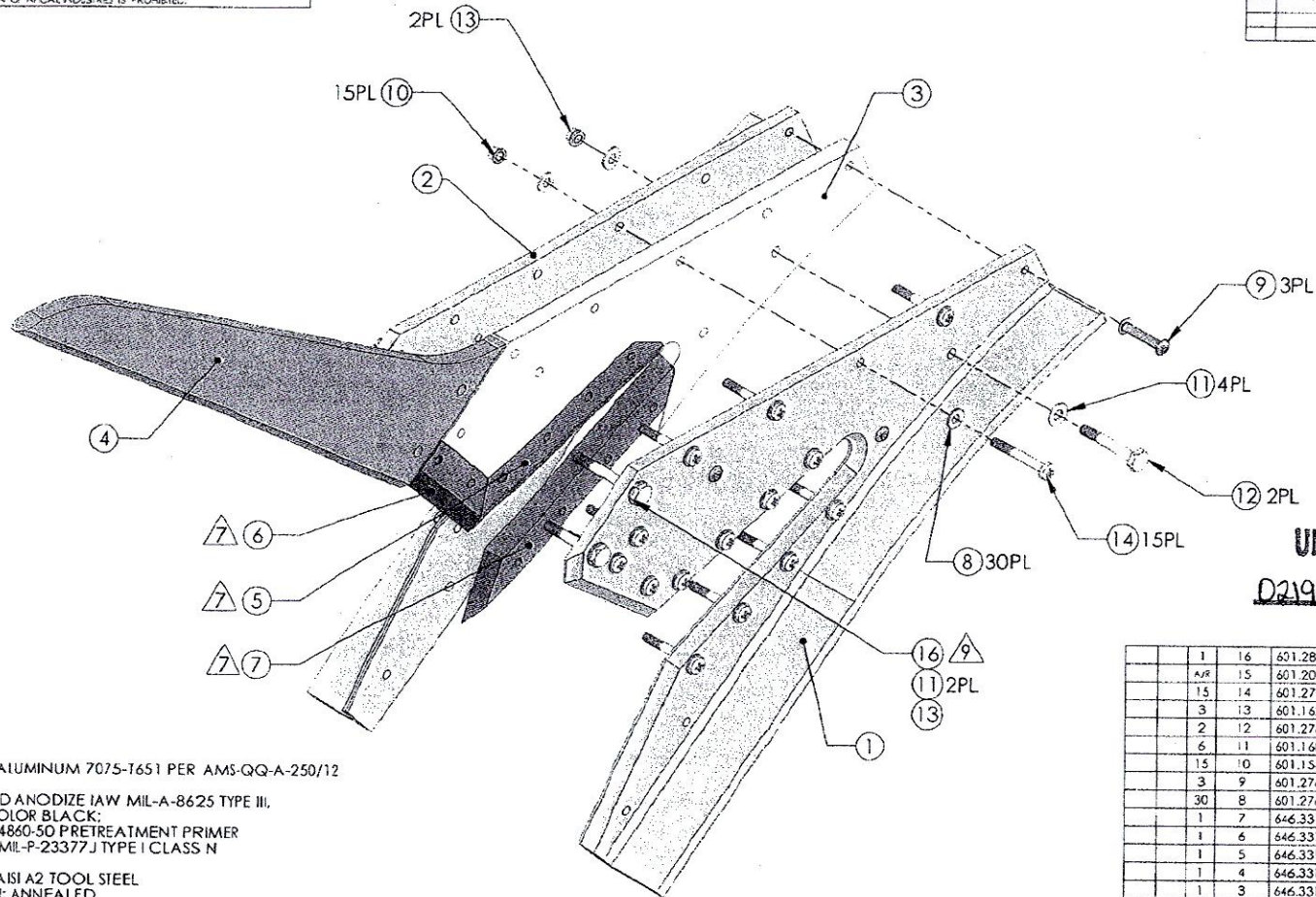
SHEET 3. SECTION VIEW A-A, IS:



SECTION A-A

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
-----	----	-------------	-----	-------------	------------------------

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REV	DESCRIPTION	DATE	APPROVED

UNINCORPORATED ECN(S)

02196, 03724, 04765

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2 COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
- 3 MATERIAL: AISI A2 TOOL STEEL CONDITION: ANNEALED POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS
- 4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
6. IDENTIFY IAW MPP-120
- 7 APPLY F/N 15 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5, 6 & 7 UPON ASSEMBLY
- 8 CUTTING EDGE INTENDED TO BE SHARP. DO NOT BREAK SHARP EDGE
- 9 INSTALL FASTENER FINGER-TIGHT

646.3301
SHOWN EXPLODED

QTY	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
1	16	601.2834	BOLT	AMS-144	
1	15	601.2045	RTV, LOCTITE 598		
15	14	601.2765	SCREW	MS2753F-0815	
3	13	601.1624	LOCKNUT	MS21049L5	
2	12	601.2763	BOLT	AMS-12A	
6	11	601.1607	WASHER	MS11490332F	
15	10	601.1541	LOCKNUT	MS2-042508	
3	9	601.2766	RIVET	MS20470A05-18	
30	8	601.2764	WASHER	MS114919032F	
1	7	646.3316	BLADE		△
1	6	646.3315	BLADE		△
1	5	646.3314	BLADE		△
1	4	646.3313	UPPER GUIDE		△
1	3	646.3312	CENTER PLATE		△
1	2	646.3311	RH HALF		△
1	1	646.3310	LH HALF		△
1	1	646.3301	UPPER CUTTER ASSY		△
1	1	646.3301	UPPER CUTTER ASSY		△
QTY	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
1	16	601.2834	BOLT	AMS-144	
1	15	601.2045	RTV, LOCTITE 598		
15	14	601.2765	SCREW	MS2753F-0815	
3	13	601.1624	LOCKNUT	MS21049L5	
2	12	601.2763	BOLT	AMS-12A	
6	11	601.1607	WASHER	MS11490332F	
15	10	601.1541	LOCKNUT	MS2-042508	
3	9	601.2766	RIVET	MS20470A05-18	
30	8	601.2764	WASHER	MS114919032F	
1	7	646.3316	BLADE		△
1	6	646.3315	BLADE		△
1	5	646.3314	BLADE		△
1	4	646.3313	UPPER GUIDE		△
1	3	646.3312	CENTER PLATE		△
1	2	646.3311	RH HALF		△
1	1	646.3310	LH HALF		△
1	1	646.3301	UPPER CUTTER ASSY		△
1	1	646.3301	UPPER CUTTER ASSY		△

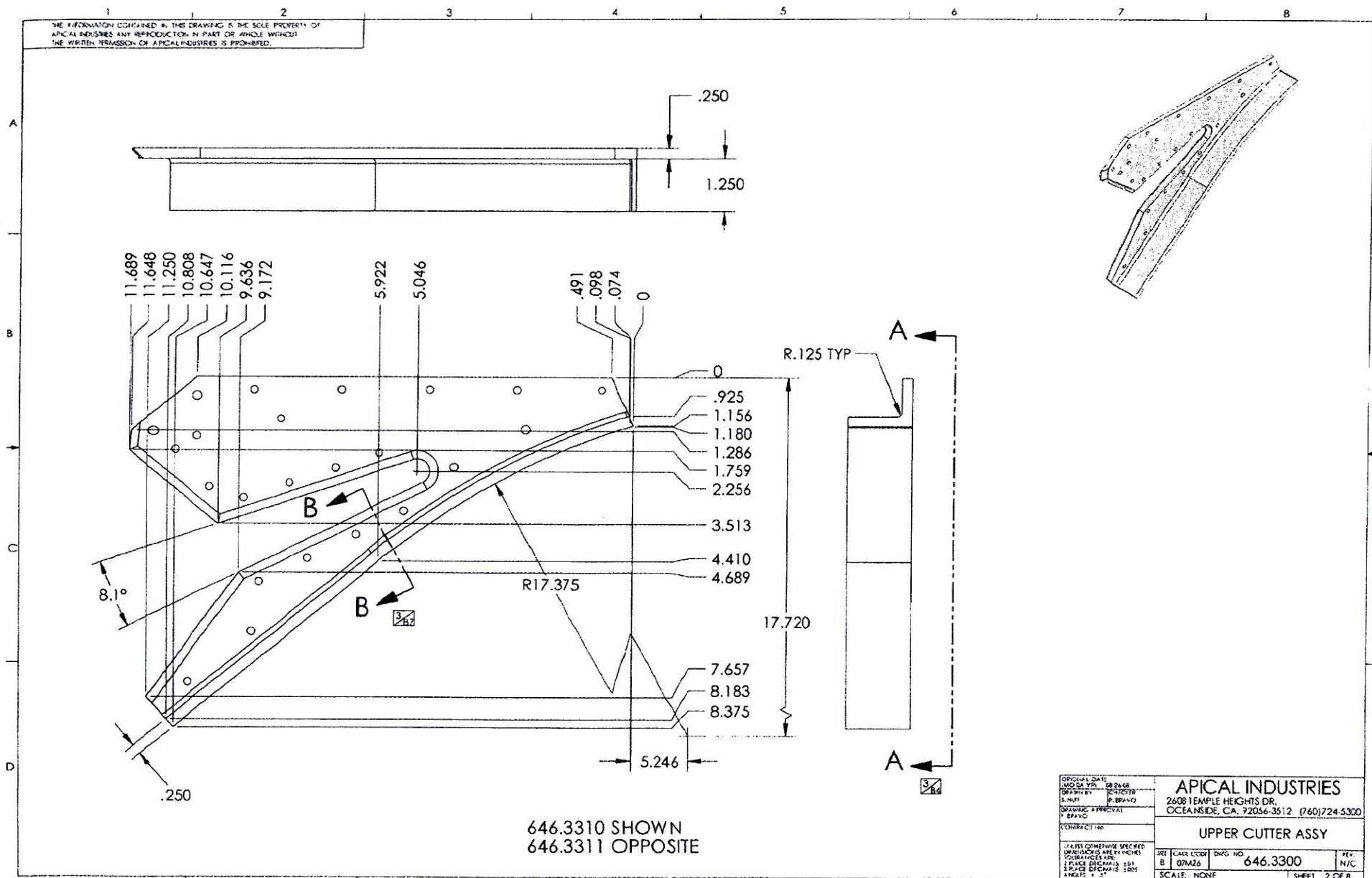
APICAL INDUSTRIES

2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

UPPER CUTTER ASSY

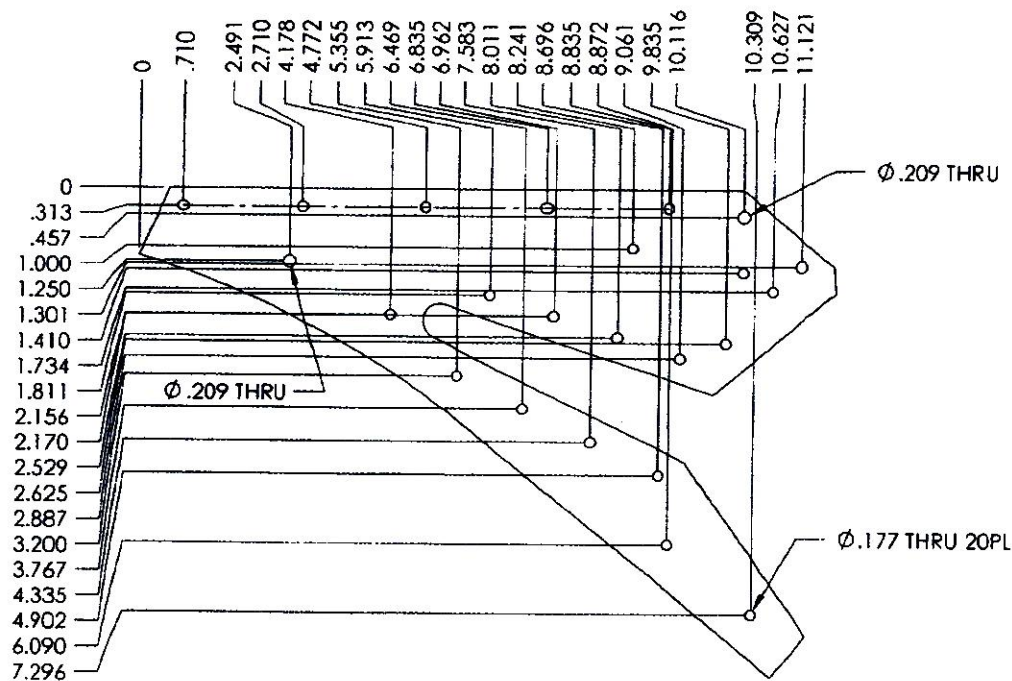
SCALE NONE SHEET 1 OF 8

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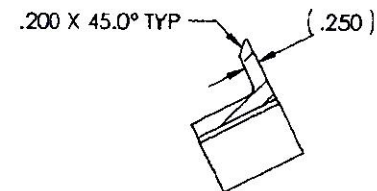


ORIGINAL DATE: 08/26/68 MODIFY: 08/26/68		APICAL INDUSTRIES	
DRAWN BY: J. BRAYO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J. BRAYO		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL: J. BRAYO		UPPER CUTTER ASSY	
DESCRIPTION:		PARTS OTHERWISE SPECIFIED	
UNLESS OTHERWISE SPECIFIED		DIMENSIONS ARE IN INCHES	
TOLERANCES ARE:		1. FRACTIONS .001	
2. DECIMALS .005		3. PLACE DECIMALS .005	
4. ANGLES 1/2°		5. RADIUS .005	
REV. B	DATE 08/26/68	DWG. NO. 646.3300	REV. N/C
SCALE: NONE		SHEET 2 OF 8	

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SECTION A-A



SECTION B-B

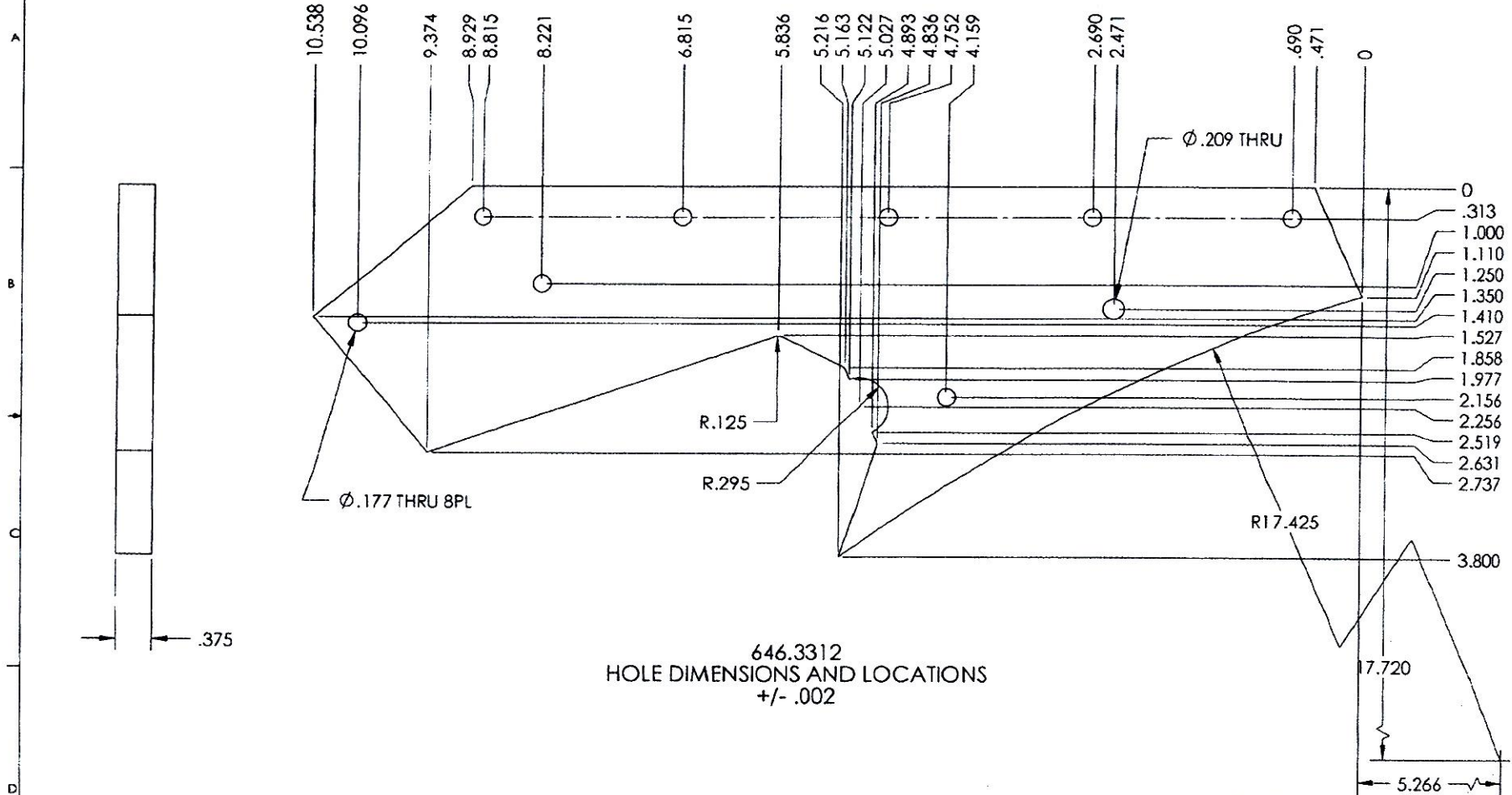
ORIGINAL DATE REV-DRAWN BY DRAWN BY DATE DESIGNER APPROVAL	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 1760/724-5300		
COMPANY NO.	UPPER CUTTER ASSY		
ALL DIMENSIONS SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 1 PLACE DECIMALS TO 2 PLACES DECIMALS TO 3 PLACES DECIMALS TO 4 PLACES DECIMALS TO			
REV.	DATE CODE	DATE	REV.
B	07/14/26	646.3300	N/C
SCALE: NONE		SHEET: 3 OF 8	

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

UPPER CUTTER ASSY

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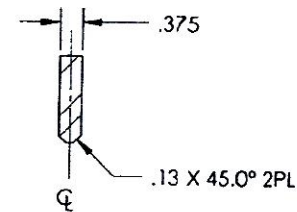
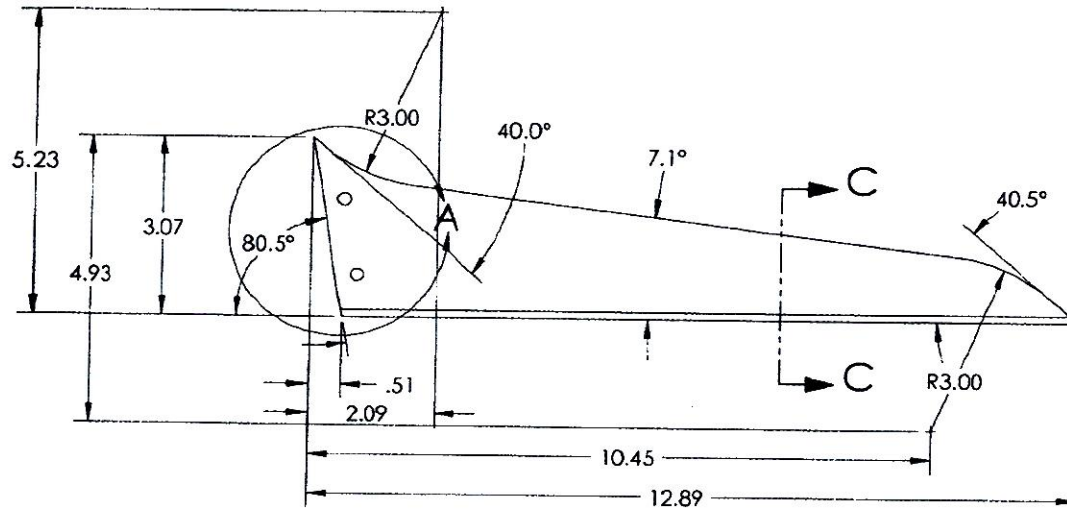
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



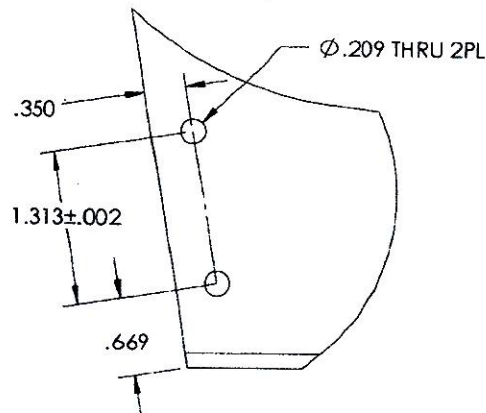
ORIGINAL DATE: 08-28-98 DESIGNED BY: J. BRYAN DRAWN BY: J. BRYAN CHECKED BY: J. BRYAN DATE: 08-28-98 CONTROL NO.:			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE: 3 PLACE DECIMALS FOR 1 PLACE DECIMALS FOR ANGLES & S.			
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	NET CAGL CODE B 07M26	DWG. NO. 646.3300	REV. N/C
UPPER CUTTER ASSY		SCALE: NONE	SHEET 4 OF 8

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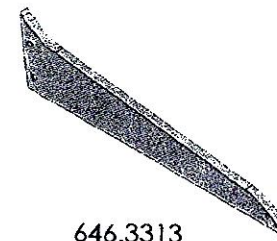
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



SECTION C-C



DETAIL A



646.3313

ORIGINAL DATE: 05-20-08 AND DATE: 05-20-08 DRAWN BY: J. HUNTER S. HUI: P. S. HUI CHECKED BY: J. HUNTER P. S. HUI 05-20-08 COMPLETE		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. FRACTIONS DECIMALS ±.01 2. FRACTIONS DECIMALS ±.005 3. ANGLES ±.5°		MFG. CODE: 0174826 SCALE: NONE	DWG. NO: 646.3300 REV: N/C SHEET: 5 OF 8
UPPER CUTTER ASSY			

1 2 3 4 5 6 7 8

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REV DESCRIPTION DATE APPROVED

8

55.6° 45.0° Ø.177 THRU 4PL .94 .240±.002 .524 R.125 .524 1.109±.002 3PL 4.257 4.90 666±.002

646.3314

325 X 30.0° 2PL 8

375

646.3300

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA 92056-3512 (760)724-5300

UPPER CUTTER ASSY

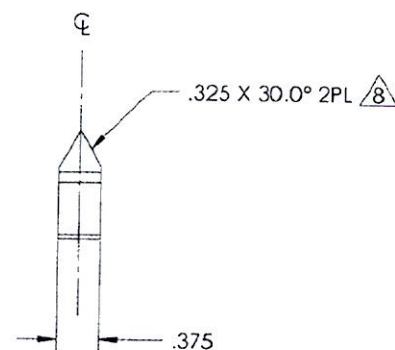
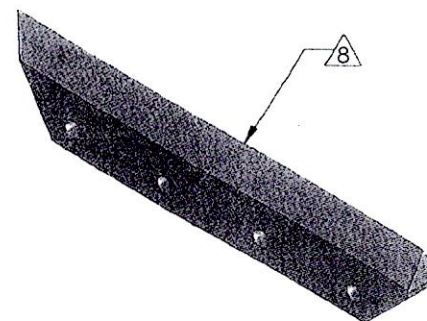
ORIGINAL DATE: 08-26-06
DESIGNED BY: J. HARRIS
CHECKED BY: J. HARRIS
DRAWING APPROVED BY: J. HARRIS
SCALE: NONE

REVISIONS SPECIFIED
DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE SPECIFIED
TOLERANCES ARE:
FRACTIONS DECIMALS ±.01
DECIMALS ±.005
ANGLES ±.5°

REV: 1
DATE: 07/12/06
BY: J. HARRIS

SHEET 6 OF 8

REVISED			
REV	DESCRIPTION	DATE	APPROVED

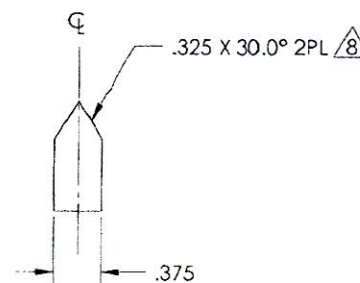
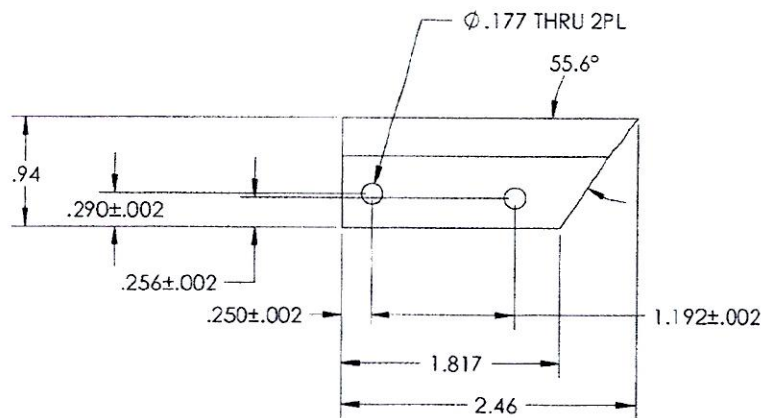
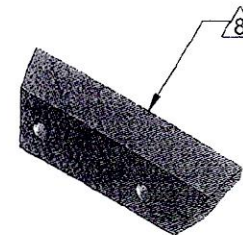


646.3314

ORGANAL DATE	2/20/06		
TEST DATE	2/20/06		
DRIVING	CHUCKER		
SPIN	P		
DRIVING APPROX.	P		
P. RATIO	P		
REMARKS			
CONTACT	140		
APICAL INDUSTRIES 2408 E MPLE HEIGHTS DR. OCEANSIDE, CA 92056-3312 (760)774-5300			
UPPER CUTTER ASSY			
PLEASE REFER TO SPECIFIC DRAWING AND SEE REMARKS FOR DIMENSIONS 1. PLATE CIRCULAR ± .005 2. PLATE CIRCULAR ± .005 3. PLATE CIRCULAR ± .005	QTY 8	CAGE CODE 7426	DWG NO 646.3300
SCALE NONE		QTY 8	
		QTY 8	

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REV	DESCRIPTION	DATE	APPROVED

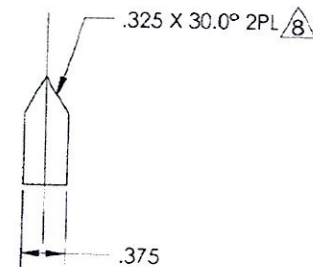
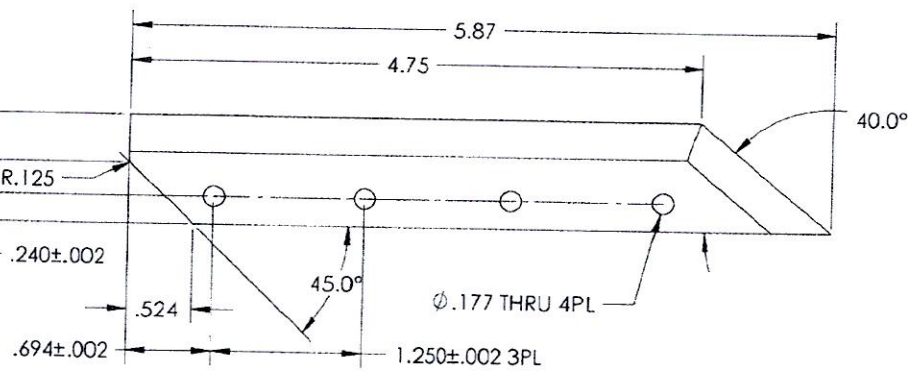
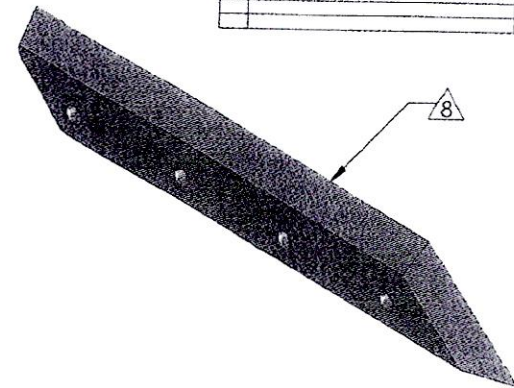


646.3315

ORIGINAL DATE 10/20/08	DESIGNED BY J. BROWN	ENGINEER J. BROWN	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300
DRAWING APPROVAL J. BROWN	CONTRACT NO.		
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ORIGINAL DATE 08/20/08		APICAL INDUSTRIES	
DRAWN BY J. HUNTER		2608 TEMPLE HEIGHTS DR.	
CHECKED BY P. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
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CONTRACT NO.		646.3300	
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SCALE NONE		SHEET 2 OF 2	